WEST Search History

Hide Items | Restore | Clear | Cancel

DATE: Wednesday, August 24, 2005

Hide?	Set Name	Query	Hit Count
	DB=USPT; PLUR=YES; OP=OR		
☐	L33	L31 and ((dynamic or configurable or chang$4) same (path$4 or connection or wire or line)) and drive	35
☐	L32	L31 and ((dynamic or configurable or chang$4) same (path$4 or connection or wire or line))	43
☐	L31	L30 and (display or visual)	93
☐	L30	L29 and RAID	188
☐	L29	L18 and "load balancing"	806
☐	L28	L18 and "LUN management" and "load balancing" and (RAID same optimize)	0
☐	L27	L25 and (raid same (group or set or selection))	87
☐	L26	L25 and group	2072
☐	L25	L24 and L23	3088
☐	L24	L21 and ((path$4 or connection or line or bus) same (display or graph$4))	11565
☐	L23	L21 and L22	3829
☐	L22	L20 and ((dynamic or configurable or reconfigurable or re-configurable or changable or manag$4) same (path$4 or connection or connections or bus or line or lines))	5171
☐	L21	L20 and (graph$4 or display)	15949
☐	L20	L18 and ((array or raid or distributed or matrix or backup) same (drive or drives or storage or non-volatile or memory))	21586
☐	L19	L18 and ((array or raid or distributed or matrix or backup) same (drive or drives or storage or non-volatile))	15677
☐	L18	2004	171673
☐	L17	L16 and L4 and L3 and L2 and L1	0
☐	L16	345	163221
☐	L15	6608635.pn.	1
☐	L14	6608635.pn.	1
☐	L13	5408597.pn.	1
☐	L12	5408597.pn.	1
☐	L11	5333254.pn.	1
☐	L10	5333254.pn.	1
☐	L9	5295244.pn.	1
☐	L8	5295244.pn.	1
☐	L7	5295243.pn.	1
☐	L6	5295243.pn.	1
☐	L5	715/734 715/736	24

☐	L4	711/114 711/115 711/161 711/162 711/170	5514
☐	L3	707/204	1923
☐	L2	703/21	463
☐	L1	710/2 710/8 710/13 710/15 710/16 710/17 710/19 710/42 710/43	3740

END OF SEARCH HISTORY

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File 347:JAPIO Nov 1976-2005/Apr(Updated 050801)
         (c) 2005 JPO & JAPIO
File 350:Derwent WPIX 1963-2005/UD,UM &UP=200553
         (c) 2005  Thomson Derwent
File 371:French Patents 1961-2002/BOPI 200209
         (c) 2002 INPI.  All rts. reserv.

Set     Items   Description
S1         10   DISKDRIVE? OR DISCDRIVE?
S2       9921   HARDDRIVE? OR CDD? ? OR HDD? ? OR FDD? ?
S3    1161784   DRIVE OR DRIVES OR MICRODRIVE? OR SUPERDRIVE? OR MINIDRIVE?
S4      58419   (HARDDISK? OR HARDDISC? OR OPTICALDIS? OR VIDEODISK? OR VI-
             DEODISC? OR LASERDISK? OR LASERDISC? OR DISK? ? OR DISC? ?)(1-
             W)S3
S5      17938   (DISCETTE? OR DISKETTE? OR HARD OR WINCHESTER OR EIDE OR I-
             DE OR ARRAY? ? OR RAID OR DISTRIBUTED OR MATRIX OR BACKUP)(1W-
             )S3
S6       2645   (BACK()UP OR SACD? ? OR DASD? ? OR NASD? ? OR DVD? ? OR SV-
             CD? ?)(1W)S3
S7    1852800   STORAGE? ? OR NONVOLATILE? OR MEMORY? OR MEMORIES OR NV OR
             NVM OR NVRAM OR NVS OR ROM OR ROMS
S8      35531   NON()(VOLATILE OR ERASEAB? OR ERASAB?)
S9       4580   (DISTRIBUTED OR MATRIX OR BACKUP OR BACK()UP)(1W)S7:S8
S10   2874417   PATH? ? OR PATHWAY? ? OR ROUTE? ? OR ROUTING? ? OR CONNECT-
             ION? ? OR LINE OR LINES OR BUS OR BUSES OR BUSSES
S11     73273   S10(5N)(DISPLAY? OR GRAPH???? ? OR GRAPHIC???? ? OR VISUAL?
              OR VIEW??? ? OR RENDER?)
S12     57626   S10(5N)(SHOW? ? OR SHOWING OR SHOWED OR OBSERV? OR APPEAR?)
S13    170488   S10(5N)(CHANG???? ? OR DYNAMIC? OR CONFIGUR? OR RECONFIGUR?
              OR MANAG??? ? OR MANAGEMENT? ? OR ARRANG???? ? OR ARRANGEMEN-
             T?)
S14       674   S10(5N)REARRANG?
S15     66289   (S1:S3 OR S7:S8)(3N)(REMOV??? ? OR INCREAS? OR DECREAS? OR
             ADD OR ADDS OR ADDED OR ADDING OR SUBTRACT? OR ADDITION?)
S16     13562   (S1:S3 OR S7:S8)(3N)(INCREM? OR DECREM? OR ELIMINAT? OR WI-
             THDRAW? OR DELET???? ?)
S17       622   S15:S16 AND S11:S12
S18        11   S17 AND (S1:S2 OR S4:S6 OR S9)
S19      9490   S13:S14 AND S11:S12
S20        47   S19 AND (S1:S2 OR S4:S6 OR S9)
S21        55   S18 OR S20
S22        55   IDPAT (sorted in duplicate/non-duplicate order)
S23        55   IDPAT (primary/non-duplicate records only)
S24     47934   (S1:S3 OR S9 OR RAID OR ARRAY? ?)(5N)(CONFIGUR? OR RECONFI-
             GUR? OR MANAG??? ? OR MANAGEMENT? ? OR ARRANG???? ? OR ARRANG-
             EMENT?)
S25       222   (S1:S3 OR S9 OR RAID OR ARRAY? ?)(5N)REARRANG?
S26       514   S24:S25 AND S11:S12
S27        28   S26 AND (S1:S2 OR S4:S6 OR S9)
S28        10   S24:S25 AND S17
S29        10   S26 AND S15:S16
S30   1596581   PATH? ? OR PATHWAY? ? OR ROUTE? ? OR ROUTING? ? OR CONNECT-
             ION? ? OR BUS OR BUSES OR BUSSES
S31     32739   S30(5N)(DISPLAY? OR GRAPH???? ? OR GRAPHIC???? ? OR VISUAL?
              OR VIEW??? ? OR RENDER?)
S32       119   S24:S25 AND S31
S33         4   S32 AND (S1:S2 OR S4:S6 OR S9)
S34        37   S27:S29 OR S33
S35        25   S34 NOT S23
S36        25   IDPAT (sorted in duplicate/non-duplicate order)
S37        25   IDPAT (primary/non-duplicate records only)
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? t23/9/12,15,17

23/9/12 (Item 12 from file: 350)
DIALOG(R)File 350:Derwent WPIX

016339918 **Image available**
WPI Acc No: 2004-497815/200447
XRPX Acc No: N04-393088

Computing system e.g. laser printer, has expansion bus bridge with set of instructions to control command registers for generating secondary expansion bus configuration **cycle emulating transparent expansion** bus configuration **cycle**

Patent Assignee: DAVIS B L (DAVI-I); MARTIN D J (MART-I)
Inventor: DAVIS B L; MARTIN D J
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 20040109195	A1	20040610	US 2002310328	A	20021205	200447	B

Priority Applications (No Type Date): US 2002310328 A 20021205
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20040109195	A1		15	G06F-013/00	

Abstract (Basic): US 20040109195 A1

NOVELTY - The system has two level expansion buses which are connected to an expansion bus bridge. The bridge has number of command registers and a set of executable instructions stored in a memory for execution by the processor. The instructions control the command registers to generate a secondary expansion **bus configuration** cycle emulating a transparent expansion **bus configuration** cycle on one of the expansion buses.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(a) a method of **routing** expansion **bus configuration** operations in a system

(b) a method of discovering expansion bus topology in a system

(c) a system for printing an image comprising a source document generator and an image-forming system

(d) a computer readable medium having computer executable instruction **configured** to discover an expansion **bus** topology

(e) a computer readable medium having computer executable instruction **configured** to **route** expansion **bus configuration** operations.

USE - Used as a laser printer, inkjet printer, thermal printer and impact printer, and in a multipurpose device which combines a printing operation with other imaging operations such as copying, faxing, and scanning of image or document, and in other computing environment using a non standard PCI bus expansion system.

ADVANTAGE - The expansion bus bridge is provided to overcome the limitations on configuration cycle generation in an EIO controller. The expansion bus bridge provides expansion for the printer by facilitating more capabilities through the addition of additional expansion slots for each bridge card used in the system. The system increases retrofit expansion capability by facilitating the addition of peripheral devices such as **hard disk drive** , an IEEE 1394 high-speed serial bus card, network card, and removable media storage device.

DESCRIPTION OF DRAWING(S) - The drawing **shows** a flow diagram of a

bus topology and expansion device discovery process.
pp; 15 DwgNo 5/6
Title Terms: COMPUTATION; SYSTEM; LASER; PRINT; EXPAND; BUS; BRIDGE; SET; INSTRUCTION; CONTROL; COMMAND; REGISTER; GENERATE; SECONDARY; EXPAND; BUS; CONFIGURATION; CYCLE; EMULATION; TRANSPARENT; EXPAND; BUS; CONFIGURATION; CYCLE
Derwent Class: T01; T04; W02
International Patent Class (Main): G06F-013/00
International Patent Class (Additional): G06F-003/12
File Segment: EPI
Manual Codes (EPI/S-X): T01-S03; T04-G02; T04-G03; T04-G04; T04-G10A; W02-J02B; W02-J05C

23/9/15 (Item 15 from file: 350)
DIALOG(R)File 350:Derwent WPIX

015960585 **Image available**
WPI Acc No: 2004-118426/200412
XRPX Acc No: N04-094612
Dynamic **data** routing **method for drive array controller, involves selecting data paths for transferring data from source to destination device based on received cache memory address**
Patent Assignee: HEWLETT-PACKARD DEV CO LP (HEWP)
Inventor: BRINKMANN H E; CALLISON R A
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6675253	B1	20040106	US 2000542309	A	20000404	200412	B

Priority Applications (No Type Date): US 2000542309 A 20000404
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6675253	B1		14	G06F-013/00	

Abstract (Basic): US 6675253 B1
NOVELTY - The data from a source device is transferred to particular cache memory in destination device in storage controller, through data path selected corresponding to cache memory address received. The data paths each have memory controller to control access to corresponding cache memory.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(1) storage controller;
(2) data handling system;
(3) drive array controller operating method.
USE - For **dynamically routing** data across multiple data **paths** from a source to destination within storage controller (claimed) e.g. **disk drive** array controller, and for data handling system (claimed).

ADVANTAGE - Provides flexible and **dynamic routing** of data to desired cache memory, thereby enabling sharing and effective use of memory and provides optimized bus performance.
DESCRIPTION OF DRAWING(S) - The figure **shows** flowchart explaining **dynamic** data **routing** process.
pp; 14 DwgNo 4/5
Title Terms: DYNAMIC; DATA; ROUTE; METHOD; DRIVE; ARRAY; CONTROL; SELECT; DATA; PATH; TRANSFER; DATA; SOURCE; DESTINATION; DEVICE; BASED; RECEIVE; CACHE; MEMORY; ADDRESS

Derwent Class: T01; T03
International Patent Class (Main): G06F-013/00
International Patent Class (Additional): G06F-015/173
File Segment: EPI
Manual Codes (EPI/S-X): T01-C01A; T01-H01B1A; T01-H03A; T01-H05B1; T01-H05B2; T03-A08A5

23/9/17 (Item 17 from file: 350)
DIALOG(R)File 350:Derwent WPIX

015839221 **Image available**
WPI Acc No: 2003-901425/200382
Related WPI Acc No: 2003-670147; 2003-901424
XRPX Acc No: N03-719770

Modular server system for Internet service, has blade that stores operating system software for server blades, and hard disk drives **that provisions each server blade with operating system software**

Patent Assignee: RIETZE P D (RIET-I); WHITCOMBE B (WHIT-I)
Inventor: RIETZE P D; WHITCOMBE B
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20030210522	A1	20031113	US 200186410	A	20011120	200382 B
			US 2003456459	A	20030605	

Priority Applications (No Type Date): US 200186410 A 20011120; US 2003456459 A 20030605
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20030210522	A1		12	G06F-001/16	Div ex application US 200186410

Abstract (Basic): US 20030210522 A1

NOVELTY - The system has a storage blade (300), a **hard disk drive** controller (330), and a set of server blades (110) connected to multiple interfaces. Each server and storage blade includes a system **management bus** connected to a system **management bus** of a midplane (170). The blade stores operating system (OS) software for the server blades. **Hard disk drives** (310, 320) provision each server blade with the OS software.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(a) a method to provision a number of servers

(b) an article having a storage medium with instructions executed by a processor to provision a number of servers.

USE - Used in a computer data center for Internet service.

ADVANTAGE - The system improves OS boot performance by decreasing the number of the storage blades or the **hard disk drives** and reduces repair, upgrade and equipment costs.

DESCRIPTION OF DRAWING(S) - The drawing **shows** a storage blade having **connection** with server blades via a midplane.

Server blades (110)
Midplane (170)
Storage blade (300)
Integrated drive electronics (IDE) **hard disk drives** (310, 320)
Hard disk drive controller (330)
Memory (335)
pp; 12 DwgNo 3/5

Title Terms: MODULE; SERVE; SYSTEM; SERVICE; BLADE; STORAGE; OPERATE;

SYSTEM; SOFTWARE; SERVE; BLADE; HARD; DISC; DRIVE; PROVISION; SERVE; BLADE; OPERATE; SYSTEM; SOFTWARE

Derwent Class: T01; T03

International Patent Class (Main): G06F-001/16

International Patent Class (Additional): H05K-005/00; H05K-007/00

File Segment: EPI

Manual Codes (EPI/S-X): T01-H01B1; T01-H07A; T01-L02B; T01-M02A1A; T01-S03; T03-A08A1C; T03-A10E3; T03-N01

9/1
DIALOG(R)File 350:Derwent WPIX

013491998 **Image available**
WPI Acc No: 2000-663941/200064
XRPX Acc No: N00-491964
Acyclic high speed serial cable bus for file server system, includes shift registers which enable some communication ports of concentration to access specific disk drives **, such that closed bus loop is not formed**
Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)
Inventor: CHISHOLM D R; MCNEILL A B
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6115764	A	20000905	US 94312854	A	19940927	200064	B

Priority Applications (No Type Date): US 94312854 A 19940927
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6115764	A		8	G06F-013/00	

Abstract (Basic): US 6115764 A
NOVELTY - Physical layer concentrators (50) are connected to communication ports of **hard disk drives** (56). TPA bias source coupled between concentrators and driver, enables some communication ports of concentrators to access corresponding disk drives. The shift registers (60) of concentrators store different patterns such that both concentrators do not access same disk drives and hence do not form closed bus loop.
DETAILED DESCRIPTION - Communication receivers in the communication port of the disk drives receive input signal from other communication ports and a communication driver outputs signal to the other ports. A port comparator compares signal received by the receivers with a reference signal to determine whether that port is connected with the other communication port of the disk drive in the serial bus which conforms to P1394 standard.
USE - For providing redundant **path** access to star **configured** devices such as RAID form disk drives in file server system.
ADVANTAGE - The PHY concentrators allow star or point-to-point connections for multiple nodes and allows removal of defective devices without disturbing packet repeater path or requiring recabling.
DESCRIPTION OF DRAWING(S) - The figure **shows** the block diagram of redundant path access system.
Physical layer concentrators (50)
Hard disk drive (56)
Shift register (60)
pp; 8 DwgNo 6/7
Title Terms: ACYCLIC; HIGH; SPEED; SERIAL; CABLE; BUS; FILE; SERVE; SYSTEM; SHIFT; REGISTER; ENABLE; COMMUNICATE; PORT; CONCENTRATE; ACCESS; SPECIFIC; DISC; DRIVE; CLOSE; BUS; LOOP; FORMING
Derwent Class: T01
International Patent Class (Main): G06F-013/00
File Segment: EPI
Manual Codes (EPI/S-X): T01-G03; T01-H01B1A
?

DIALOG(R)File 350:Derwent WPIX

016685643 **Image available**
WPI Acc No: 2005-009924/200501
Related WPI Acc No: 2005-252371
XRPX Acc No: N05-007790

Segregated user interface for e.g. disk drive system, has component object module/dynamic link library interface module configuring failover driver based on detected status of controller and storage devices

Patent Assignee: ADAPTEC INC (ADAP-N)
Inventor: CHENG E; DING Y; WU C

Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6823477	B1	20041123	US 2001768860	A	20010123	200501	B

Priority Applications (No Type Date): US 2001768860 A 20010123
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6823477	B1		20	G06F-011/00	

Abstract (Basic): US 6823477 B1

NOVELTY - The interface (402) has a failover graphical user interface (GUI) module (404) receiving parameters of a multi-path failover system. A component object module (COM)/dynamic link library (DLL) interface module (406) detects current status of controller and storage devices. The COM/DLL interface module configures a failover filter driver using the received configuration parameters, based on the detected status.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(A) a method of **configuring** parameters in a multi- **path** failover system

(B) a system for **configuring** parameters in a multi- **path** failover system.

USE - Used in a multi-path computer storage system e.g. disk drive system, for **configuring** parameter in a multi- **path** failover system (claimed).

ADVANTAGE - The COM/DLL interface module configures the failover driver based on the detected status of the controller and storage devices for providing continuous access to the input/output device of the storage system. The detection of the controller and storage devices status provides masking abilities to avoid the double logical drive letters for physical drives of the storage system.

DESCRIPTION OF DRAWING(S) - The drawing **shows** a multi-path computer storage system including a segregated interface to configure an intelligent failover system.

Failover filter driver (218)
Multi-path computer storage system (400)
Segregated user interface (402)
Failover graphical user interface module (404)
Component object module/dynamic link library interface module (406)
pp; 20 DwgNo 4/9

Title Terms: SEGREGATE; USER; INTERFACE; DISC; DRIVE; SYSTEM; COMPONENT; OBJECT; MODULE; DYNAMIC; LINK; LIBRARY; INTERFACE; MODULE; DRIVE; BASED; DETECT; STATUS; CONTROL; STORAGE; DEVICE
Derwent Class: T01; W01
International Patent Class (Main): G06F-011/00
File Segment: EPI
Manual Codes (EPI/S-X): T01-F05A; T01-F05B2; T01-F05E; T01-F05G; T01-F07;

T01-G05C; T01-H01B4; T01-H01B7; T01-J12B1; T01-J20B; T01-N02A2A;
T01-N02A2D; W01-A06B5A; W01-A06B5B
?

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File 348:EUROPEAN PATENTS 1978-2005/Aug W02
         (c) 2005 European Patent Office
File 349:PCT FULLTEXT 1979-2005/UB=20050818,UT=20050811
         (c) 2005 WIPO/Univentio
File 324:German Patents Fulltext 1967-200532
         (c) 2005 Univentio

Set     Items   Description
S1        228   DISKDRIVE? OR DISCDRIVE?
S2      14161   HARDDRIVE? OR CDD? ? OR HDD? ? OR FDD? ?
S3     857053   DRIVE OR DRIVES OR MICRODRIVE? OR SUPERDRIVE? OR MINIDRIVE?
S4      44434   (HARDDISK? OR HARDDISC? OR OPTICALDIS? OR VIDEODISK? OR VI-
             DEODISC? OR LASERDISK? OR LASERDISC? OR DISK? ? OR DISC? ?)(1-
             W)S3
S5      35526   (DISCETTE? OR DISKETTE? OR HARD OR WINCHESTER OR EIDE OR I-
             DE OR ARRAY? ? OR RAID OR DISTRIBUTED OR MATRIX OR BACKUP)(1W-
             )S3
S6       2588   (BACK()UP OR SACD? ? OR DASD? ? OR NASD? ? OR DVD? ? OR SV-
             CD? ?)(1W)S3
S7    1027745   STORAGE? ? OR NONVOLATILE? OR MEMORY? OR MEMORIES OR NV OR
             NVM OR NVRAM OR NVS OR ROM OR ROMS
S8      48081   NON()(VOLATILE OR ERASEAB? OR ERASAB?)
S9       5153   (DISTRIBUTED OR MATRIX OR BACKUP OR BACK()UP)(1W)S7:S8
S10   2682847   PATH? ? OR PATHWAY? ? OR ROUTE? ? OR ROUTING? ? OR CONNECT-
             ION? ? OR LINE OR LINES OR BUS OR BUSES OR BUSSES
S11    250236   S10(5N)(DISPLAY? OR GRAPH???? ? OR GRAPHIC???? ? OR VISUAL?
              OR VIEW??? ? OR RENDER?)
S12    506623   S10(5N)(SHOW? ? OR SHOWING OR SHOWED OR OBSERV? OR APPEAR?)
S13    458491   S10(5N)(CHANG???? ? OR DYNAMIC? OR CONFIGUR? OR RECONFIGUR?
              OR MANAG??? ? OR MANAGEMENT? ? OR ARRANG???? ? OR ARRANGEMEN-
             T?)
S14      1438   S10(5N)REARRANG?
S15    155543   (S1:S3 OR S7:S8)(3N)(REMOV??? ? OR INCREAS? OR DECREAS? OR
             ADD OR ADDS OR ADDED OR ADDING OR SUBTRACT? OR ADDITION?)
S16     25667   (S1:S3 OR S7:S8)(3N)(INCREM? OR DECREM? OR ELIMINAT? OR WI-
             THDRAW? OR DELET???? ?)
S17      1333   S15:S16(20N)S11:S12
S18        76   S17(20N)(S1:S2 OR S4:S6 OR S9)
S19     35485   S13:S14(20N)S11:S12
S20        73   S19(20N)(S1:S2 OR S4:S6 OR S9)
S21       146   S18 OR S20
S22    346580   LOAD? ?(2N)BALANC? OR OPTIMI?
S23        29   S21 AND S22
S24        29   IDPAT (sorted in duplicate/non-duplicate order)
S25        28   IDPAT (primary/non-duplicate records only)
S26       537   S15:S16(20N)S11
S27        49   S26(20N)(S1:S2 OR S4:S5 OR S9)
S28      8797   S13:S14(20N)S11
S29        18   S28(20N)(S1:S2 OR S4:S5 OR S9)
S30        66   S27 OR S29
S31        55   S30 NOT S23
S32        55   IDPAT (sorted in duplicate/non-duplicate order)
S33        54   IDPAT (primary/non-duplicate records only)
S34        38   S33 AND AC=US/PR
S35        38   S34 AND AY=(1970:2004)/PR
S36        51   S33 AND PY=1970:2004
S37        52   S35:S36
S38     70954   *deleted*  IC=G11B
S39        16   S21 AND S38
S40        13   S39 NOT (S23 OR S30)
S41      3797   IC='G11B-017'
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S42       2929   IC='G11B-019'
S43          6   (S26 OR S28) AND S42
S44          8   S21/TI,AB,CM
S45     144653   (S1:S3 OR S9 OR RAID OR ARRAY? ?)(5N)(CONFIGUR? OR RECONFI-
              GUR? OR MANAG??? ? OR MANAGEMENT? ? OR ARRANG???? ? OR ARRANG-
              EMENT?)
S46        384   (S1:S3 OR S9 OR RAID OR ARRAY? ?)(5N)REARRANG?
S47        577   S45:S46(20N)S11
S48          7   S45:S46(20N)S26
S49         19   S47(20N)(S1:S2 OR S4:S5 OR S9)
S50         15   S47 AND IC=G11B
S51          9   S47(20N)S15:S16
S52    2141608   PATH? ? OR PATHWAY? ? OR ROUTE? ? OR ROUTING? ? OR CONNECT-
             ION? ? OR BUS OR BUSES OR BUSSES
S53      70617   S52(5N)(DISPLAY? OR GRAPH???? ? OR GRAPHIC???? ? OR VISUAL?
              OR VIEW??? ? OR RENDER?)
S54        124   S45:S46(20N)S53
S55          7   S54(20N)(S1:S2 OR S4:S5 OR S9)
S56         20   S54/TI,AB,CM
S57          3   S54 AND IC=G11B
S58         23   S56:S57
?
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File 347:JAPIO Nov 1976-2005/Apr(Updated 050801)
(c) 2005 JPO & JAPIO
File 350:Derwent WPIX 1963-2005/UD,UM &UP=200553
(c) 2005 Thomson Derwent
File 348:EUROPEAN PATENTS 1978-2005/Aug W02
(c) 2005 European Patent Office
File 349:PCT FULLTEXT 1979-2005/UB=20050818,UT=20050811
(c) 2005 WIPO/Univentio
File 324:German Patents Fulltext 1967-200532
(c) 2005 Univentio

Set	Items	Description
S1	41290	AU=SUZUKI K?
S2	109125	(DISC? ? OR DISK? OR DISCETTE?)(1W)DRIVE? ? OR DISKDRIVE? - OR DISCDRIVE?
S3	1108	S2(10N)(PATH? ? OR PATHWAY? OR ROUTE? ? OR ROUTING? ?)
S4	2	S1 AND S3

4/9/1 (Item 1 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2005 JPO & JAPIO. All rts. reserv.

07909299 **Image available**
CONTROL METHOD OF STORAGE DEVICE, AND STORAGE DEVICE

PUB. NO.: 2004-022058 [JP 2004022058 A]
PUBLISHED: January 22, 2004 (20040122)
INVENTOR(s): **SUZUKI KATSUKI**
KANO AZUMA
APPLICANT(s): HITACHI LTD
APPL. NO.: 2002-174948 [JP 2002174948]
FILED: June 14, 2002 (20020614)
INTL CLASS: G11B-033/14; G06F-001/20

ABSTRACT

PROBLEM TO BE SOLVED: To provide a control method of a storage device which is desirable for reducing power consumption of the device having a basic casing and an additional casing, and for reducing noise, and to provide the device.

SOLUTION: The storage device is provided with a basic casing 20 to which a storage device and a controller are mounted, an additional casing 30 to which a storage device and peripheral equipment are mounted and an FC-AL loop 60 that is a transmission **path** to connect a controller 71 and the **disk drive** 51 of the casing 20 and a disk drive 51 of the casing 30 so that these units are communicated with each other. The operation of the drive 51 of the casing 30 is controlled in accordance with the operating condition of the drive 51 of the casing 20 by the communication through the path and the operation of the peripheral equipment of the casing 30 is controlled in accordance with the operating condition of the disk drive 51.

4/5/2 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.

01921096
Disk array apparatus and method for controlling the same

Speicherplattenanordnungsgerat und Verfahren fur dessen Steuerung
Appareil de reseau de disques et procede de commande de celui-ci

PATENT ASSIGNEE:
Hitachi Ltd., (204155), 6, Kanda Surugadai 4-chome, Chiyoda-ku, Tokyo, (JP), (Applicant designated States: all)
INVENTOR:
Suzuki, Katsuyoshi, Hitachi Ltd , Intel.Prop.Grp New MarunouchiBldg 5-1-1 Marunouchi, Chiyoda-ku Tokyo 100-8220, (JP)
Hirasawa, Akihisa, Hitachi Ltd, Intel.Prop.Grp New MarunouchiBldg 5-1-1 Marunouchi, Chiyoda-ku Tokyo 100-8220, (JP
LEGAL REPRESENTATIVE:
Holt, Daniel Richard et al (136361), Mewburn Ellis LLP York House 23 Kingsway, London WC2B 6HP, (GB)
PATENT (CC, No, Kind, Date): EP 1548564 A2 050629 (Basic)
APPLICATION (CC, No, Date): EP 2005003365 040414;
PRIORITY (CC, No, Date): JP 2003145111 030522
DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LI; LU; MC; NL; PL; PT; RO; SE; SI; SK; TR
EXTENDED DESIGNATED STATES: AL; HR; LV; MK
RELATED PARENT NUMBER(S) - PN (AN):
EP 1486863 (EP 2004252186)
INTERNATIONAL PATENT CLASS: G06F-003/06

ABSTRACT EP 1548564 A2
An apparatus includes a controller and a plurality of disk drives. The controller has a communication control unit for accepting a data input/output request, a disk controller unit for controlling a disk drive, and a cache memory for temporarily storing data transferred between the communication control unit and the disk controller unit. The plurality of disk drives has different communication interfaces and connected to the disk controller unit to communicate with the disk controller unit.
ABSTRACT WORD COUNT: 76
NOTE:
Figure number on first page: 6

LEGAL STATUS (Type, Pub Date, Kind, Text):
Application: 050629 A2 Published application without search report
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200526	946
SPEC A	(English)	200526	9443
Total word count - document A			10389
Total word count - document B			0
Total word count - documents A + B			10389

```
File   9:Business & Industry(R) Jul/1994-2005/Aug 22
         (c) 2005  The Gale Group
File  16:Gale Group PROMT(R) 1990-2005/Aug 23
         (c) 2005 The Gale Group
File  47:Gale Group Magazine DB(TM) 1959-2005/Aug 23
         (c) 2005 The Gale group
File 148:Gale Group Trade & Industry DB 1976-2005/Aug 23
         (c)2005 The Gale Group
File 160:Gale Group PROMT(R) 1972-1989
         (c) 1999 The Gale Group
File 275:Gale Group Computer DB(TM) 1983-2005/Aug 23
         (c) 2005 The Gale Group
File 570:Gale Group MARS(R) 1984-2005/Aug 23
         (c) 2005 The Gale Group
File 621:Gale Group New Prod.Annou.(R) 1985-2005/Aug 23
         (c) 2005 The Gale Group
File 636:Gale Group Newsletter DB(TM) 1987-2005/Aug 23
         (c) 2005 The Gale Group
File 649:Gale Group Newswire ASAP(TM) 2005/Aug 11
         (c) 2005 The Gale Group

Set     Items   Description
S1        259   DISKDRIVE? OR DISCDRIVE?
S2      56438   HARDDRIVE? OR CDD? ? OR HDD? ? OR FDD? ?
S3    2420112   DRIVE OR DRIVES OR MICRODRIVE? OR SUPERDRIVE? OR MINIDRIVE?
S4     267268   (HARDDISK? OR HARDDISC? OR OPTICALDIS? OR VIDEODISK? OR VI-
              DEODISC? OR LASERDISK? OR LASERDISC? OR DISK? ? OR DISC? ?)(1-
              W)S3
S5     300118   (DISCETTE? OR DISKETTE? OR HARD OR WINCHESTER OR EIDE OR I-
              DE OR ARRAY? ? OR RAID OR DISTRIBUTED OR MATRIX OR BACKUP)(1W-
              )S3
S6      31239   (BACK()UP OR SACD? ? OR DASD? ? OR NASD? ? OR DVD? ? OR SV-
              CD? ?)(1W)S3
S7    2712583   STORAGE? ? OR NONVOLATILE? OR MEMORY? OR MEMORIES OR NV OR
              NVM OR NVRAM OR NVS OR ROM OR ROMS
S8      19669   NON()(VOLATILE OR ERASEAB? OR ERASAB?)
S9      16488   (DISTRIBUTED OR MATRIX OR BACKUP OR BACK()UP)(1W)S7:S8
S10  21733958   PATH? ? OR PATHWAY? ? OR ROUTE? ? OR ROUTING? ? OR CONNECT-
              ION? ? OR LINE OR LINES OR BUS OR BUSES OR BUSSES
S11    215296   S10(5N)(DISPLAY? OR GRAPH???? ? OR GRAPHIC???? ? OR VISUAL?
               OR VIEW??? ? OR RENDER?)
S12    165264   S10(5N)(SHOW? ? OR SHOWING OR SHOWED OR OBSERV? OR APPEAR?)
S13    552362   S10(5N)(CHANG???? ? OR DYNAMIC? OR CONFIGUR? OR RECONFIGUR?
               OR MANAG??? ? OR MANAGEMENT? ? OR ARRANG???? ? OR ARRANGEMEN-
              T?)
S14      1003   S10(5N)REARRANG?
S15    271427   (S1:S3 OR S7:S8)(3N)(REMOV??? ? OR INCREAS? OR DECREAS? OR
              ADD OR ADDS OR ADDED OR ADDING OR SUBTRACT? OR ADDITION?)
S16     28840   (S1:S3 OR S7:S8)(3N)(INCREM? OR DECREM? OR ELIMINAT? OR WI-
              THDRAW? OR DELET???? ?)
S17      1213   S15:S16(S)S11:S12
S18       208   S17(S)(S1:S2 OR S4:S6 OR S9)
S19     13300   S13:S14(S)S11:S12
S20       157   S19(S)(S1:S2 OR S4:S6 OR S9)
S21  17556783   PATH? ? OR PATHWAY? ? OR ROUTE? ? OR ROUTING? ? OR CONNECT-
              ION? ? OR BUS OR BUSES OR BUSSES
S22     60682   S21(5N)(DISPLAY? OR GRAPH???? ? OR GRAPHIC???? ? OR VISUAL?
               OR VIEW??? ? OR RENDER?)
S23       410   S15:S16(S)S22
S24        76   S23(S)(S1:S2 OR S4:S6 OR S9)
S25      3571   S13:S14(S)S22
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S26          98   S25(S)(S1:S2 OR S4:S6 OR S9)
S27         173   S24 OR S26
S28           0   S27/2005
S29         106   RD S27 (unique items)
S30      131960   (S1:S3 OR S9 OR RAID OR ARRAY? ?)(5N)(CONFIGUR? OR RECONFI-
                  GUR? OR MANAG??? ? OR MANAGEMENT? ? OR ARRANG???? ? OR ARRANG-
                  EMENT?)
S31         200   (S1:S3 OR S9 OR RAID OR ARRAY? ?)(5N)REARRANG?
S32         151   S30:S31(S)S22
S33          90   S32(S)(S1:S2 OR S4:S6 OR S9)
S34           0   S33/2005
S35          71   S33 NOT (S27 OR FDDI)
S36          37   RD (unique items)
?
```

36/3,K/31 (Item 5 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

01586558 SUPPLIER NUMBER: 13445578 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Trailblazer 1.1: Windows for utility novices. (Twisted Pine Software Corp.'s file management software) (Software Review) (Evaluation)
Scisco, Peter
PC Sources, v4, n3, p225(1)
March, 1993
DOCUMENT TYPE: Evaluation ISSN: 1052-6579 LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 388 LINE COUNT: 00030

...ABSTRACT: shell separates the screen into five sections called slates. The Storage Slate displays icons for **disk drives** , files, directories and applications. The On Deck Slate is a setup area for file operations. It also displays the current time, date and position of the sun and moon. The **Path** Slate gives drive location. The **View** Slate is the largest of the five slates. It performs a variety of functions including file selection and directory creation and **management** . View Slate also displays **drive** information as icons, a hierarchy or directory trees. Some of Trailblazer's functions require steps...

03925343 Supplier Number: 45671686 (USE FORMAT 7 FOR FULLTEXT)
Next-Generation OS Proves Worth Wait
Computer Reseller News, pS43
July 17, 1995
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 1430

... user's desires, which can be completely different than the physical directory structure on the **hard drive** . Unlike the old File **Manager** , Windows Explorer **displays** all drive **connections** in one window.

The Start menu, the single-most-prominent new interface aspect of Windows...

```
File   6:NTIS 1964-2005/Aug W2
         (c) 2005 NTIS, Intl Cpyrght All Rights Res
File   2:INSPEC 1969-2005/Aug W2
         (c) 2005 Institution of Electrical Engineers
File   8:Ei Compendex(R) 1970-2005/Aug W2
         (c) 2005 Elsevier Eng.  Info. Inc.
File  57:Electronics & Communications Abstracts 1966-2005/Jul
         (c) 2005 CSA.
File  34:SciSearch(R) Cited Ref Sci 1990-2005/Aug W2
         (c) 2005 Inst for Sci Info
File  56:Computer and Information Systems Abstracts 1966-2005/Jul
         (c) 2005 CSA.
File  35:Dissertation Abs Online 1861-2005/Jul
         (c) 2005 ProQuest Info&Learning
File  60:ANTE: Abstracts in New Tech & Engineer 1966-2005/Jul
         (c) 2005 CSA.
File  65:Inside Conferences 1993-2005/Aug W3
         (c) 2005 BLDSC all rts. reserv.
File  94:JICST-EPlus 1985-2005/Jul W1
         (c)2005 Japan Science and Tech Corp(JST)
File  95:TEME-Technology & Management 1989-2005/Jul W3
         (c) 2005 FIZ TECHNIK
File  99:Wilson Appl. Sci & Tech Abs 1983-2005/Jul
         (c) 2005 The HW Wilson Co.
File 144:Pascal 1973-2005/Aug W2
         (c) 2005 INIST/CNRS
File 256:TecInfoSource 82-2005/Aug
         (c) 2005 Info.Sources Inc
File 266:FEDRIP 2005/Jun
         Comp & dist by NTIS, Intl Copyright All Rights Res
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13
         (c) 2002 The Gale Group

Set     Items   Description
S1         18   DISKDRIVE? OR DISCDRIVE?
S2      28016   HARDDRIVE? OR CDD? ? OR HDD? ? OR FDD? ?
S3     434663   DRIVE OR DRIVES OR MICRODRIVE? OR SUPERDRIVE? OR MINIDRIVE?
S4      29279   (HARDDISK? OR HARDDISC? OR OPTICALDIS? OR VIDEODISK? OR VI-
             DEODISC? OR LASERDISK? OR LASERDISC? OR DISK? ? OR DISC? ?)(1-
             W)S3
S5      15051   (DISCETTE? OR DISKETTE? OR HARD OR WINCHESTER OR EIDE OR I-
             DE OR ARRAY? ? OR RAID OR DISTRIBUTED OR MATRIX OR BACKUP)(1W-
             )S3
S6        889   (BACK()UP OR SACD? ? OR DASD? ? OR NASD? ? OR DVD? ? OR SV-
             CD? ?)(1W)S3
S7    1696403   STORAGE? ? OR NONVOLATILE? OR MEMORY? OR MEMORIES OR NV OR
             NVM OR NVRAM OR NVS OR ROM OR ROMS
S8       9847   NON()(VOLATILE OR ERASEAB? OR ERASAB?)
S9      28694   (DISTRIBUTED OR MATRIX OR BACKUP OR BACK()UP)(1W)S7:S8
S10   4962182   PATH? ? OR PATHWAY? ? OR ROUTE? ? OR ROUTING? ? OR CONNECT-
             ION? ? OR LINE OR LINES OR BUS OR BUSES OR BUSSES
S11     85335   S10(5N)(DISPLAY? OR GRAPH???? ? OR GRAPHIC???? ? OR VISUAL?
              OR VIEW??? ? OR RENDER?)
S12    241113   S10(5N)(SHOW? ? OR SHOWING OR SHOWED OR OBSERV? OR APPEAR?)
S13    156312   S10(5N)(CHANG???? ? OR DYNAMIC? OR CONFIGUR? OR RECONFIGUR?
              OR MANAG??? ? OR MANAGEMENT? ? OR ARRANG???? ? OR ARRANGEMEN-
             T?)
S14      4438   S10(5N)REARRANG?
S15     57106   (S1:S3 OR S7:S8)(3N)(REMOV??? ? OR INCREAS? OR DECREAS? OR
```

```
            ADD OR ADDS OR ADDED OR ADDING OR SUBTRACT? OR ADDITION?)
S16      5224   (S1:S3 OR S7:S8)(3N)(INCREM? OR DECREM? OR ELIMINAT? OR WI-
            THDRAW? OR DELET???? ?)
S17       430   S15:S16 AND S11:S12
S18        56   S17 AND (S1:S2 OR S4:S6 OR S9)
S19     14626   S13:S14 AND S11:S12
S20        35   S19 AND (S1:S2 OR S4:S6 OR S9)
S21        91   S18 OR S20
S22         1   S21/2005
S23        86   S21 NOT (S22 OR FDDI)
S24        65   RD (unique items)
S25        33   S24 NOT (CDDP OR CDDO)
S26     28131   (S1:S3 OR S9 OR RAID OR ARRAY? ?)(5N)(CONFIGUR? OR RECONFI-
            GUR? OR MANAG??? ? OR MANAGEMENT? ? OR ARRANG???? ? OR ARRANG-
            EMENT?)
S27       400   (S1:S3 OR S9 OR RAID OR ARRAY? ?)(5N)REARRANG?
S28       339   S26:S27 AND S11:S12
S29        29   S27:S28 AND (S1:S2 OR S4:S6 OR S9)
S30         0   S26:S27 AND S17
S31         0   S28 AND S15:S16
S32         1   S29/2005
S33        21   S29 NOT (S32 OR S21 OR FDDI OR CDDP OR CDDO)
S34        14   RD (unique items)
```

? t25/7/15-16

25/7/15 (Item 5 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

04474057 Genuine Article#: TF529 Number of References: 37
Title: ADVANCED COMPILER OPTIMIZATIONS FOR SPARSE COMPUTATIONS
Author(s): BIK AJC; WIJSHOFF HAG
Corporate Source: LEIDEN UNIV,DEPT COMP SCI,DIV HIGH PERFORMANCE COMP,POB 9512/2300 RA LEIDEN//NETHERLANDS/
Journal: JOURNAL OF PARALLEL AND DISTRIBUTED COMPUTING, 1995, V31, N1 (NOV 15), P14-24
ISSN: 0743-7315
Language: ENGLISH Document Type: ARTICLE
Abstract: Regular data dependence checking on sparse codes usually results in very conservative estimates of the actual dependences occurring at run-time. Clearly, this is caused by the usage of compact data structures necessary to exploit sparsity in order to reduce storage requirements and computational time. However, if the compiler is presented with dense code and automatically converts it into code operating on sparse data structures, then the dependence information obtained by analysis of the original code can be used to exploit potential concurrency in the generated sparse code. In this paper, we explore synchronization generating and manipulating techniques based on this concept. (C) 1995 Academic Press Inc.

25/7/16 (Item 6 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

04440646 Genuine Article#: TD260 Number of References: 16
Title: LINEAR ALGEBRA CALCULATIONS ON A VIRTUAL SHARED-MEMORY COMPUTER
Author(s): AMESTOY PR; DUFF IS; DAYDE MJ; MORERE P
Corporate Source: UNIV TOULOUSE 3,IRIT,ENSEEIHT/F-31062 TOULOUSE//FRANCE/; CERFACS/F-31057 TOULOUSE//FRANCE/; UNIV TOULOUSE 3,IRIT,ENSEEIHT/F-31071 TOULOUSE//FRANCE/; RUTHERFORD APPLETON LAB/DIDCOT OX11 0QX/OXON/ENGLAND/
Journal: INTERNATIONAL JOURNAL OF HIGH SPEED COMPUTING, 1995, V7, N1 (MAR), P21-43
ISSN: 0129-0533
Language: ENGLISH Document Type: ARTICLE
Abstract: We evaluate the impact of the memory hierarchy of virtual shared memory computers on the design of algorithms for linear algebra. On classical shared memory multiprocessor computers, block algorithms are used for efficiency. We study here the potential and the limitations of such approaches on globally addressable **distributed memory** computers. The BBN TC2000 belongs to this class of computers and will be used to illustrate our discussion.

We describe the implementation of Level 3 BLAS and examine the performance of some of the LAPACK routines. The impact of the number of processors with respect to the choice of the variants of classical matrix factorizations (for example, KJI, JKI, JIX for the LU factorization) is discussed. We also study the factorization of sparse matrices based on a multifrontal approach. The ideas introduced for the parallelization of full linear algebra codes are applied to the sparse case. We discuss and illustrate the limitations of this approach in sparse multifrontal factorization.

We show that the speed-ups obtained on the BBN TC2000 for the class of methods presented here are comparable to those obtained on more classical shared memory computers, such as the Alliant FX/80, the GRAY-2 and the IBM 3090/VF.

? t25/7/20-21,27

25/7/20 (Item 10 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

03927533 Genuine Article#: QT097 Number of References: 52
Title: SPAR - A NEW ARCHITECTURE FOR LARGE FINITE-ELEMENT COMPUTATIONS
Author(s): TAYLOR VE; RANADE A; MESSERSCHMITT DG
Corporate Source: NORTHWESTERN UNIV,DEPT ELECT ENGN & COMP SCI/EVANSTON//IL/60208; UNIV CALIF BERKELEY,DEPT EECS/BERKELEY//CA/94720
Journal: IEEE TRANSACTIONS ON COMPUTERS, 1995, V44, N4 (APR), P531-545
ISSN: 0018-9340
Language: ENGLISH Document Type: ARTICLE
Abstract: The finite element method is a general and powerful technique for solving partial differential equations. The computationally intensive step of this technique is the solution of a linear system of equations. Very large and very sparse system matrices result from large finite-element applications. The sparsity must be exploited for efficient use of memory and computational components in executing the solution step. In this paper we propose a scheme, called SPAR, for efficiently storing and performing computations on sparse matrices. SPAR consists of an alternate method of representing sparse matrices and an architecture that efficiently executes computations on the proposed data structure. The SPAR architecture has not been built, but we have constructed a register-transfer level simulator and executed the sparse matrix computations used with some large finite element applications. The simulation results demonstrate a 95% utilization of the floating-point units for some 3D applications. SPAR achieves high utilization of memory, memory bandwidth, and floating-point units when executing sparse matrix computations.

25/7/21 (Item 11 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

03769442 Genuine Article#: QE105 Number of References: 22
Title: A CARTESIAN PARALLEL NESTED DISSECTION ALGORITHM
Author(s): HEATH MT; RAGHAVAN P
Corporate Source: UNIV ILLINOIS,DEPT COMP SCI,405 N MATHEWS AVE/URBANA//IL/61801; UNIV ILLINOIS,NATL CTR SUPERCOMP APPLICAT/URBANA//IL/61801
Journal: SIAM JOURNAL ON MATRIX ANALYSIS AND APPLICATIONS, 1995, V16, N1 (JAN), P235-253
ISSN: 0895-4798
Language: ENGLISH Document Type: ARTICLE
Abstract: This paper is concerned with the distributed parallel computation of an ordering for a symmetric positive definite sparse matrix. The purpose of the ordering is to limit fill and enhance concurrency in the subsequent Cholesky factorization of the matrix. A geometric approach to nested dissection is used based on a given Cartesian embedding of the graph of the matrix in Euclidean space. The resulting algorithm can be implemented efficiently on massively parallel, **distributed memory** computers. One unusual feature of the distributed algorithm is that its effectiveness does not depend on data locality, which is critical

in this context, since an appropriate partitioning of the problem is not known until after the ordering has been determined, The ordering algorithm is the first component in a suite of scalable parallel algorithms currently under development for solving large sparse linear systems on massively parallel computers.

25/7/27 (Item 1 from file: 144)
DIALOG(R)File 144:Pascal

13424473 PASCAL No.: 98-0118168
Constant time graph **algorithms on the** reconfigurable **multiple** bus **machine**
TRAHAN J L; VAIDYANATHAN R; SUBBARAMAN C P
Department of Electrical and Computer Engineering, Louisiana State University, Baton Rouge, Louisiana 70803-5901, United States; Department of Electrical and Computer Engineering, University of California at Irvine, Irvine, California 92717, United States
Journal: Journal of parallel and distributed computing, 1997, 46 (1) 1-14
ISSN: 0743-7315 Availability: INIST-20948; 354000078255170010
No. of Refs.: 33 ref.
Document Type: P (Serial) ; A (Analytic)
Country of Publication: United States
Language: English
The **reconfigurable** multiple **bus** machine (RMBM) is a model of parallel computation based on **reconfigurable buses** . Unlike other **reconfigurable bus** -based models such as the **reconfigurable** mesh (R-Mesh), the RMBM separates the functions of processors and switches. In this paper, we present constant time RMBM algorithms for a number of fundamental graph problems. These algorithms are more efficient, in terms of processors, than corresponding R-Mesh algorithms. Also presented is a novel range reduction technique for a constant time simulation of each step of a Priority CRCW RMBM on a Common or Collision CRCW RMBM. This simulation incurs only a factor of 0(P SUP element of) increase in the number of processors and buses, where element of > 0 is any constant and P is the number of processors in the simulated Priority CRCW RMBM. This method may be of independent interest. The algorithms presented in this paper demonstrate the potential for fast and processor-efficient computation available in the ability of a **reconfigurable bus** -based model to separate the functions of processors and switches.

?